

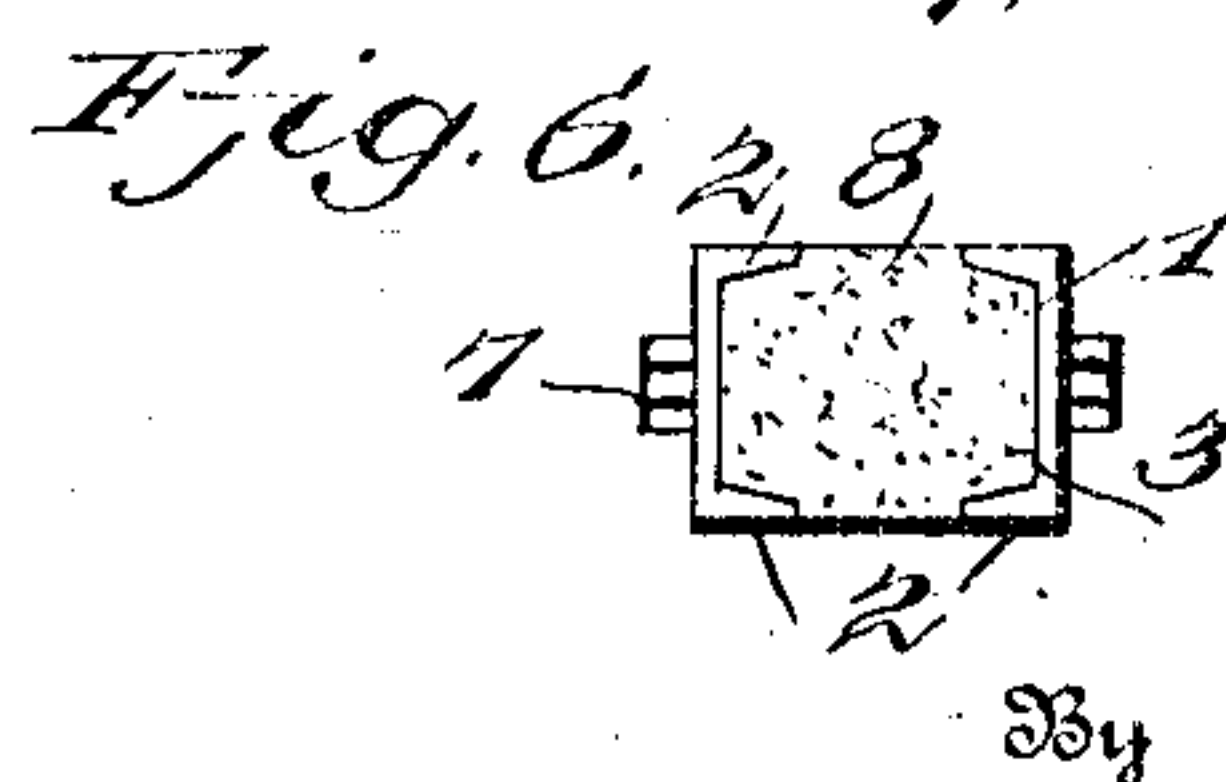
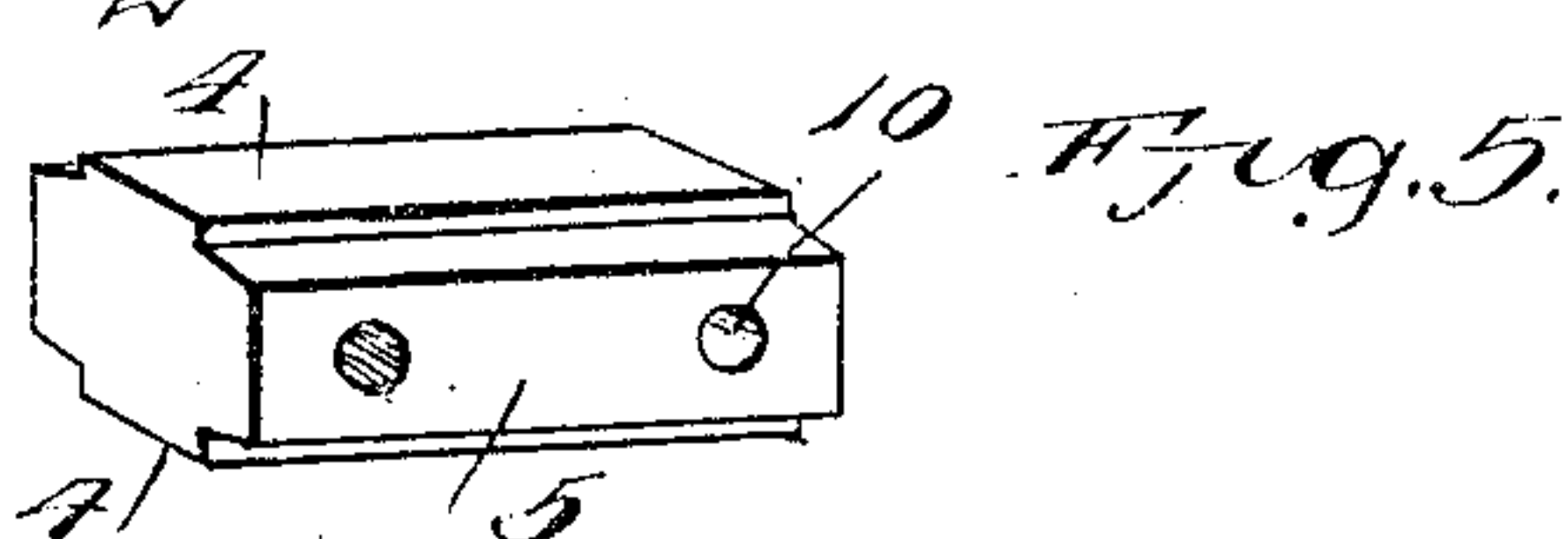
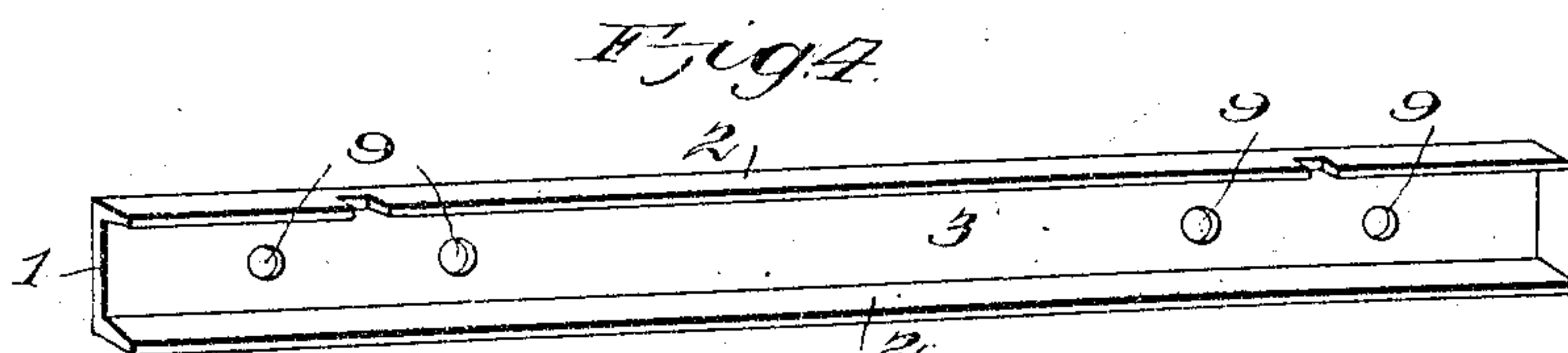
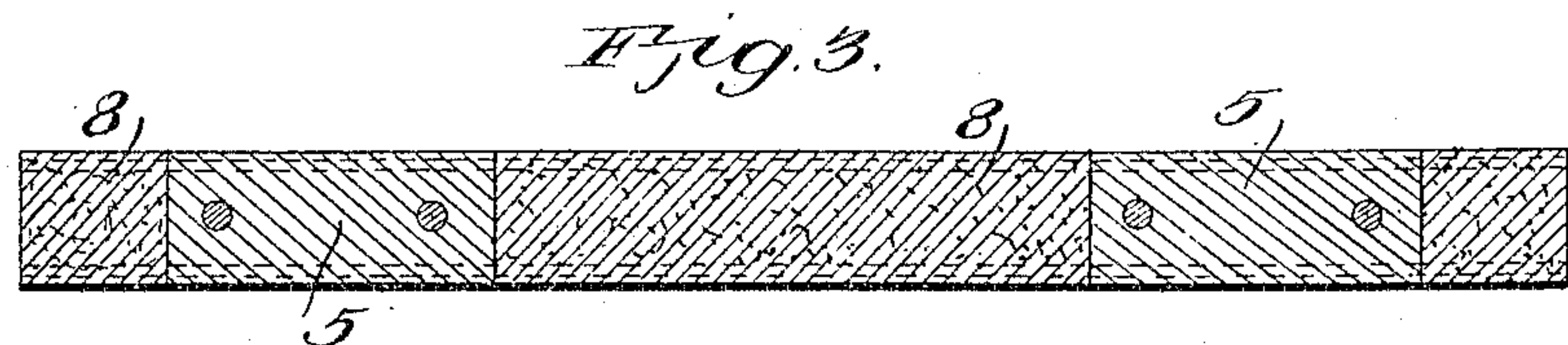
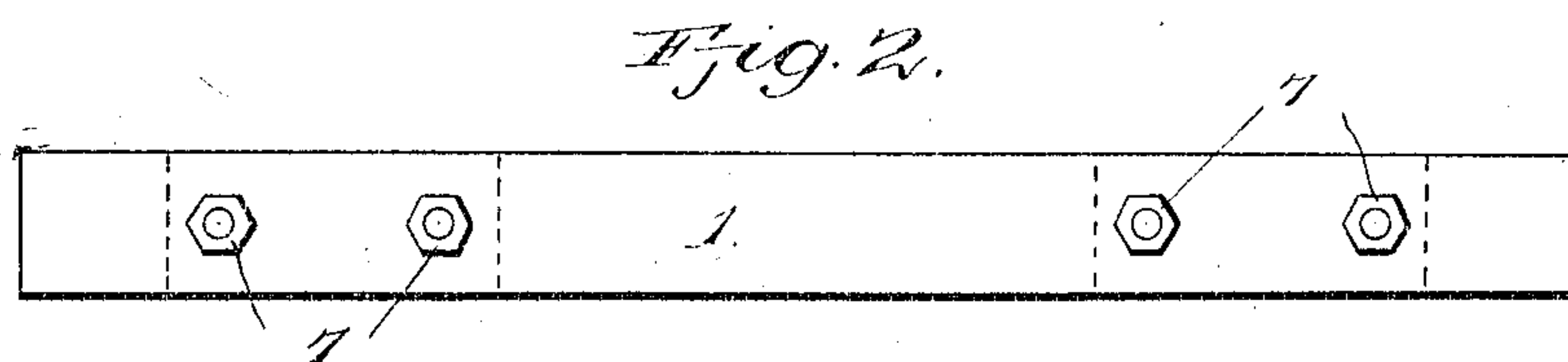
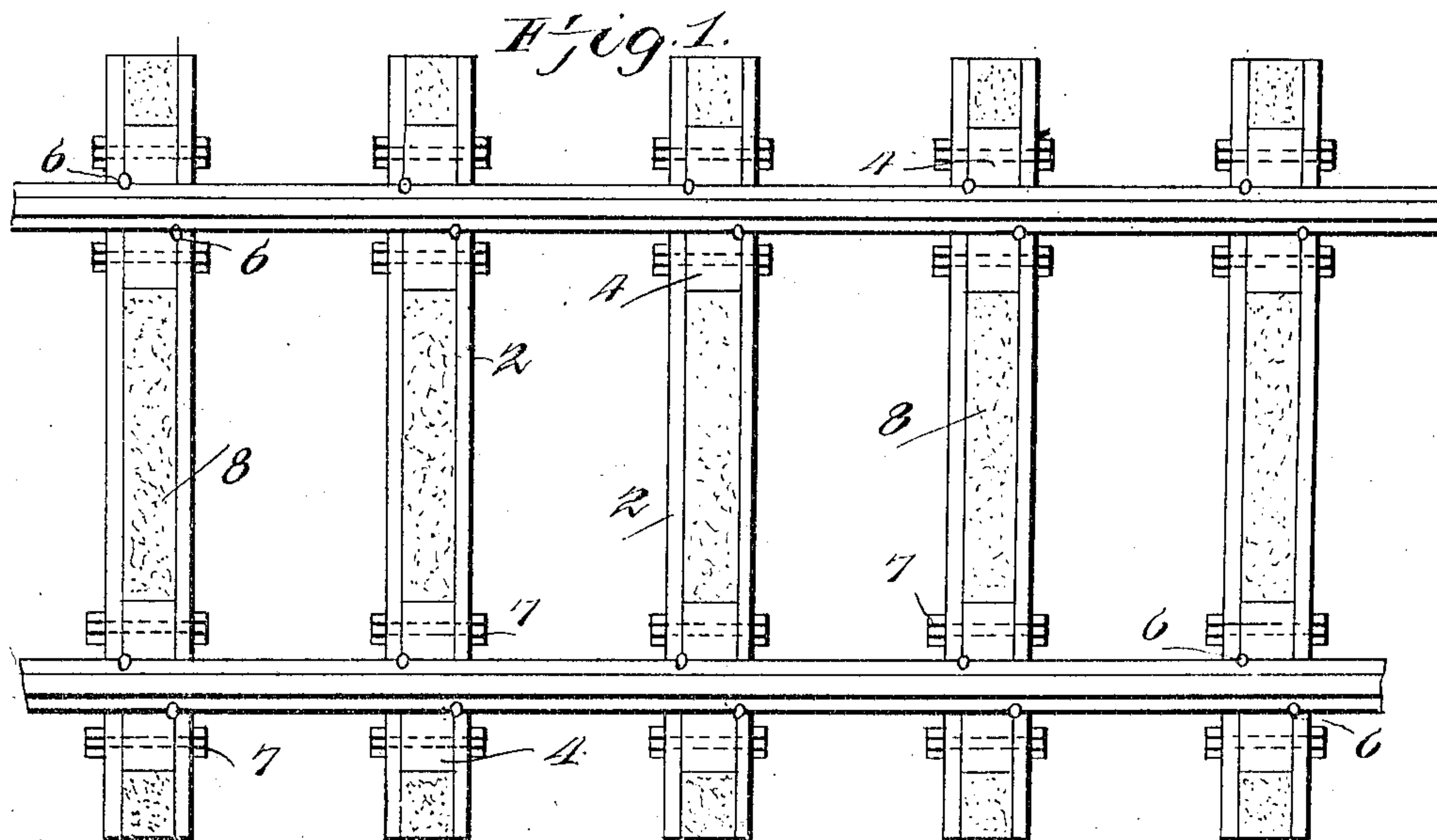
No. 815,065.

PATENTED MAR. 13, 1906.

F. COLEMAN.

RAIL TIE.

APPLICATION FILED JUNE 27, 1905.



Witnesses  
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# UNITED STATES PATENT OFFICE.

FRANK COLEMAN, OF BRIDGEWATER, CANADA.

## RAIL-TIE.

No. 815,065.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed June 27, 1905. Serial No. 267,253.

*To all whom it may concern:*

Be it known that I, FRANK COLEMAN, a citizen of the United States of America, residing at Bridgewater, in the Province of Nova Scotia, Canada, have invented new and useful Improvements in Rail-Ties, of which the following is a specification.

My invention relates to railway-ties; and its primary object is to produce a comparatively simple inexpensive device of this character which in practice will be exceedingly strong and durable and which will firmly support the railway-rails.

With the above and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter fully described, claimed, and illustrated in the accompanying drawings, which disclose the preferred form of my invention, and wherein—

Figure 1 is a top plan view of a fragmentary portion of a railway constructed with ties made in accordance with my invention. Fig. 2 is a side elevation of one of the ties. Fig. 3 is a central horizontal sectional view thereof. Fig. 4 is a detail perspective view of one of the side plates of the tie. Fig. 5 is a detail perspective view of one of the spacing-blocks, and Fig. 6 is an end view of the tie.

Referring to the drawings by reference, 1 1 designate side plates, which are preferably constructed of steel and which have their longitudinal edges turned downwardly to provide horizontal flanges 2 2, whereby the plates are provided with channeled portions. These plates are adapted to be secured together in endwise position and are spaced apart by means of blocks 4. The blocks have their sides cut away or mortised to produce reduced portions 5, adapted to fit in the channels 3 of the plates 1 and are of a thickness equal to the transverse extent of the plates 1, whereby their upper edges lie flush with the upper surfaces of the flanges 2, as is clearly illustrated in Fig. 6 of the drawings. The blocks not only space the plates 1 1, but also receive the spikes 6 for securing the rails in applied position upon the ties, and they are secured in applied position by bolts 7 or their equivalent and positioned from the ends of the plates 1 inwardly a sufficient dis-

tance to permit of the rails being spaced apart the ordinary gage.

The spaces between the blocks and between the outer ends thereof and the extremities of the plates 1 are filled with cement 8 or other suitable composition.

The blocks are impregnated with a preservative compound for preventing decay and attacks of insects and worms.

The several elements of the ties are assembled in the following manner: The plates are first arranged in parallel relation, then the blocks have their reduced portions 5 positioned between the flanges 2 2, and then the plates and blocks are firmly united by bolts 7, passing through openings 9 in the plates 1 and similar openings 10 in the blocks 4. After the plates and blocks have been thus secured together the cement or concrete 8 is applied in any preferred manner.

From the foregoing description, taken in connection with the accompanying drawings, the construction and mode of operation of the invention will be understood without a further description.

Changes in the form, proportions, and minor details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

Having thus fully described the invention, what is claimed as new is—

1. A railway-tie consisting of two channeled plates, blocks positioned between said plates to space them and to receive the means for fastening the rails to the ties, and a filling of concrete.

2. A railway-tie comprising two channeled plates, blocks provided with reduced portions adapted to be received by said channels, whereby the plates are spaced apart, said blocks being adapted to receive the means for fastening rails to the ties, and a filling of cement.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK COLEMAN.

Witnesses:

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